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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/596,081	06/16/2000	Michael F. Brice	11047.100	2958

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EXAMINER

GRAHAM, GARY K

ART UNIT

PAPER NUMBER

1744

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/596,081

**Applicant(s)**

BRICE, MICHAEL F.

**Examiner**

Gary K Graham

**Art Unit**

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-12 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-12 and 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8-12 and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Brice (U.S. patent 5,499,421).

The patent to Brice discloses the invention as is claimed. Note figure 10 which shows a toothbrush including an elongated handle (61) shaped to be grasped by a user, a first and second neck (64L,64R) extending from an end of the handle and said necks supporting first and second bristle supports or head (66,67) at distal ends thereof. A plurality of first and second bristles extend from the respective heads. Said first and second bristles extend in the same direction and are substantially parallel to one another.

The “wherein” phrases at the end of claims 9-12 and 17-19 do not appear to define any structure not shown or suggested by the Brice patent. The first and second plurality of bristles of the Brice patent will have a stiffness and the first and second necks will have a resiliency, flexibility and bending resistance as is claimed. Defining that the resiliency, flexibility and bending resistance are set depending upon both brushing force and stiffness of bristles **such that the toothbrush adapts to a dento-gingival junction and all other changing surfaces or provides effective plaque disruption or gum stimulation** does not define any particular structure or structural relationships not set forth by the Brice patent. Such only relates to the desired functionality of the toothbrush.

Further, since the patent to Brice discloses all of the structure claimed, it appears it will inherently function as is claimed. Why would the toothbrush of Brice not adapt, have effective plaque disruption or effective gum stimulation as is claimed? What is the physical difference between the toothbrush disclosed in the patent and that which is claimed? While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. (*In re Schreiber*, 128 F.3d 1473,1477-78,44 USPQ2d 1429,1431-32 (Fed. Cir. 1997)).

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brice (U.S. patent 5,499,421) in view of Lamond et al (U.S. patent 5,875,510).

The patent to Brice discloses all of the above recited subject matter with the exception of the handle having an oval-shaped cavity therein with an oval-shaped resilient thumb contact inserted therein.

The patent to Lamond discloses a toothbrush (fig.1) including a handle (4) with an oval-shaped cavity (24) therein and an oval-shaped resilient pad (20) inserted into said cavity. Resilient pads, as disclosed by Lamond, are known to be provided with toothbrush handles to increase the grip of the user.

It would have been obvious to one of skill in the art to provide the handle of Brice with a cavity and a resilient pad therein, as clearly suggested by Lamond, to increase the grip of the user of such toothbrush.

*Response to Arguments*

Applicant's arguments filed 24 May 2004 have been fully considered but are not persuasive. Applicant argues that the Examiner has misread the '421 patent and that such does not disclose the resiliency, flexibility and bending resistance of the claimed necks. As set forth above, the "wherein" phrases at the ends of the claims, while setting forth that the bristles have a stiffness and that the necks have a resiliency, flexibility and bending resistance, do not define any particular structure or structural relationships not disclosed or inherently met by the '421 patent. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. (*In re Schreiber*, 128 F.3d 1473,1477-78,44 USPQ2d 1429,1431-32 (Fed. Cir. 1997)). Applicant appears to be claiming that the necks are set depending on the brushing force and stiffness of the bristles such that the toothbrush adapts to a dento-gingival junction and all other changing surfaces. This does not define any particular relationship. Merely claiming that various components of the toothbrush are designed, one part being "set" with respect to another part, to brush well does not appear to distinguish from the '421 patent. Applicant cannot define over the disclosed equivalent structure of the '421 patent by mere desired functioning, especially when such functioning is reasonably expected to be performed by the '421 toothbrush. Further, since the '421 patent discloses all the structure that is claimed, it should inherently function or be "set" as is claimed. Why would the '421 toothbrush not perform or be "set" as is claimed?

Additionally, applicant's attention is particularly directed to column 3, lines 29-35 of the Brice '421 patent. There it is disclosed that "...while conventional toothbrushes merely skim over the inter-dental regions, the twin heads of the present invention results in a purposeful stopping/pausing action, allowing the user to experience a momentary "fixing" or **adaptation** of the brushing head on the individual tooth and the respective gum areas encountered therein without excessive concentrated pressure to a singular region". Thus, it appears the toothbrush of the '421 patent will adapt to dento-gingival junctions as is claimed.

It is noted that no particular argument is made with respect to the Brice/Lamond 103 rejection of claims 2-7.

### *Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

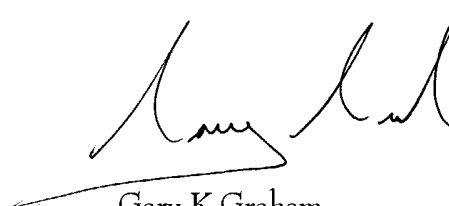
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary K Graham whose telephone number is 571-272-1274. The examiner can normally be reached on Tuesday to Friday (6:30-4:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Warden can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in black ink, appearing to read 'Gary K Graham', with a long horizontal line extending from the bottom left of the signature.

Gary K Graham  
Primary Examiner  
Art Unit 1744

28 June 2004  
GKG